Comprehensive Research Experience for Medical Students (CREMS)

2022 Supervisor and Project Information Form

Please complete and return via email ONLY to crems.programs@utoronto.ca by February 18, 2022.

Supervisor Information

NOTE: CREMS will not support pre-determined pairings of students and supervisors. Supervisors must agree to open their projects to all students and interview all that are interested.

Name: Catharine Walsh

Email: catharine.walsh@utoronto.ca

Department: Department of Paediatrics

Hospital/Research Institution: SickKids Research Institute, Hospital for Sick Children

SGS Department(s) (if applicable):
IHPME, IMS

ORCID ID (see https://orcid.org/ - If you do not have an ORCID ID we encourage you to sign up for one):
0000-0003-3928-703X

Location of Work:
Peter Gilgan Center for Research and Learning (SickKids Research Institute) and remote

Field of Research (up to 4 keywords):
patient-reported outcome measures, celiac disease, pediatrics, health outcomes

Student contact time (number of hours per week YOU are available to the student for any concerns or to review progress):
I will meet weekly with the student for ½ hour per week and I will be available during the week for consultation as needed. The student will attend my research team meetings.
**Project Information**

*NOTE: If this project is selected, this information will be posted on CREMS website for interested student applicants to view research opportunities.*

**PROJECT TITLE:**

Patient-reported outcome measures in pediatric celiac disease: A feasibility analysis

**PROJECT DESCRIPTION:**

Including background, aim(s), methodS and significance of the project. **Maximum 300 words.**

**Background:** Recognition of the importance of the patient voice in medicine has been increasing steadily, particularly for individuals with chronic diseases. Patient-reported outcome measures (PROMs) provide a means by which clinicians can gain insight into patients’ self-perceived health experiences. Owing to its immense heterogeneity of symptoms, management of celiac disease in children necessitates interdisciplinary care, with the goal being strict adherence to a gluten-free diet and the best possible health-related quality of life and long-term symptom management. To capture children’s and parent’s perceptions of the impact of celiac disease an electronic patient-reported outcome measure (ePROM) system was recently established at the Hospital for Sick Children. For a successful implementation of such an ePROM system, it is essential to investigate patients’ and caregivers’ willingness to participate and to evaluate their compliance with the system.

**Aims:** To assess patient and caregiver compliance with real-time ePROM collection in routine pediatric celiac disease care and to identify possible factors leading to low compliance.

**Methods:** ePROMS data collected from children followed in the Children’s Celiac Clinic at The Hospital for Sick Children, and their caregivers, will be utilized. Patients and caregivers receive an email with a link to their ePROMS, which can be opened and answered via a web-enabled device ahead of their clinic visit. A descriptive analysis will be conducted to determine sociodemographic and clinical characteristics across a patient sample of children and their caregivers who were sent ePROMS between June 2019 and June 2022. Multivariable regression analysis will be performed to identify factors predicting compliance.

**Outcomes:** This work will help to elucidate the feasibility of ePROMS and evaluate factors that influence compliance and should be considered when setting-up ePROM system to optimize the use of PROMs in shared-decision making related to pediatric celiac disease.

**Is this project remote-capable (in case of new restrictions) or have an alternative remote option?**

☒ Yes, remote capable ☐ No

☐ Yes, alternate remote option. Please specify (100 words max): Click or tap here to enter text.

**If human subjects are involved, have the appropriate Research Ethics Board approvals been obtained?**

☒ Yes ☐ No ☐ Not Applicable
If yes, please list the application submission date:

Do you expect this work will be published?
☒ Yes  ☐ No  ☐ Uncertain / Other
Research Environment and Student Roles and Responsibilities

Please be specific as possible. Please describe the research environment, including availability of required facilities/equipment/expertise, supervisor’s experience and mentorship plans. Please clearly outline the student role(s) and responsibilities related to the project, potential educational value, and indicate who will serve as the student’s direct report for daily oversight (PI, PHD student, technician, etc.). Maximum 300 words.

Dr. Walsh is a staff gastroenterologist at the Hospital for Sick Children and a Scientist in the SickKids Research Institute. She is an associate professor in the Institute of Health Policy, Management and Evaluation and the Institute of Medical Science, University of Toronto. She is co-lead of the Children’s Celiac Clinic at The Hospital for Sick Children which follows over 800 children with celiac disease. She has a strong publication track record and has mentored over 30 students. Additionally, a strong research team has been assembled for this project which will help to support the student and provide them with learning and professional development opportunities.

The student will be based at the Peter Gilgan Centre for Research and Learning (PGCRL) at SickKids and will have a desk in Dr. Walsh’s lab. The student will have opportunities to interact with research staff, students, trainees, and scientists during their project and will be supported by research coordinators. In the event that all on-site research work is suspended due to the COVID-19 pandemic, the student will be able to carry out the project remotely. The student will work with Dr. Walsh’s research team and will be integrated within the Celiac Team at The Hospital for Sick Children. They will meet with Dr. Walsh at least weekly and will attend research lab meetings.

The student will be responsible for all steps of this project including a literature review and other background research activities, data entry, analysis, and contributing to manuscript writing. Ethical approval has already been obtained. They will gain hands-on experience with coordinating and implementing a research study with multiple stakeholders. The student is required to have access to a computer. Students with analytic experience with SAS or R are strongly encouraged to apply.